

## Work Order ID 101765

\*101765\*

Page 1

May-13-13 1:13:44 PM

Item ID: D2622-120C

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Step Extrusion

Start Date: 5/13/13 Start Qty: 110.00

\*110\*

Cust Item ID:

Required Date: 6/03/13 Req'd Qty: 110.00

\*110\*

Customer:

Reference:

Approvals: Process Plan: CXDate: 13/05/14 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start \*NR1\*

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr

Revision Nbr

D2622

Rev C1

100

0.00

\*100\*

Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O: 19871 a) Extrude as per Dwg D2622 Rev. Cb)  
Material: 6061-T6 (QQ-A-200/8)c) Minimum yield tensile strength = 35  
ksid) Minimum ultimate tensile strength = 38 ksi e) Minimum elongation =  
8%f) Order at 120" longg) Bon L Canada Inc.

CX 13/05/14 120

110

Receive &amp; Inspect for Damage &amp; Mat'l Certs

0.00

\*110\*

Packaging

Memo

0.00

Packaging

Ensure material certification is attached

13/05/13 140

120

QC6- Inspect dimensions to drawing

0.00

\*120\*

QC

Memo

0.00

Quality Control

Check Pull test per Dwg D2622 for compliance page attached Check hardness  
with Webster tester

DAS  
27

13-7-22

DAS  
27

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause                             | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling <input type="checkbox"/> |      |      |     |   |                   |                    |             |              |              |
| Operator <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Material <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Setup <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Other <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Process <input type="checkbox"/>       |      |      |     |   |                   |                    |             |              |              |
| Supplier <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Training <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Unapproved <input type="checkbox"/>    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

|   |   |   |  |   |
|---|---|---|--|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |
|---|---|---|--|---|

# Work Order ID 101765

\*101765\*

Page 2

May-13-13 1:13:44 PM

Item ID: D2622-120C

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Step Extrusion

Start Date: 5/13/13 Start Qty: 110.00

\*110\*

Cust Item ID:

Required Date: 6/03/13 Req'd Qty: 110.00

\*110\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description                         | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp    |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|-------------------|
| 130                            | Identify as per dwg & Stock Location: <u>WMA</u> | 0.00                 |         |        |              |               |               |                  |                   |
| *130*                          | Pull Qty 120 PLS FOR                             | 0.00                 |         |        |              | 120           | 0             |                  | DAS<br>19<br>9-89 |
| Packaging                      | Memo   |                      |         |        |              |               |               |                  |                   |
| Packaging                      | on spot inspection                               |                      |         |        |              |               |               |                  | 13-07-22          |
| 140                            | QC21- Final Inspection - Work Order Release      | 0.00                 |         |        |              |               |               |                  |                   |
| *140*                          |  |                      |         |        |              |               |               |                  |                   |
| QC                             | Memo   | 0.00                 |         |        |              |               |               |                  |                   |
| Quality Control                |  |                      |         |        |              |               |               |                  |                   |

MLJ 13-07-23

MLJ 13-07-23

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |
|--|---|---|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |
|--|---|---|

| Root Cause    | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Setup         |      |      |     |   |                   |                    |             |              |              |
| Other         |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other _____                     |

# Picklist Print

Page 1

May-13-13 1:13:43 PM

Work Order ID: 101765  
Parent Item: D2622-120C  
Parent Item Name: Step Extrusion

Start Date: 5/13/13  
Start Qty: 110.00

Required Date: 6/03/13  
Required Qty: 110.00

## Comments:

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D2622-120CP<br>Extrusion        |                        | Purchased     | No          |                     |                  | 110             | Each               | 0.0000         | 1           | 110          |               |                |        |

4/30/31 640

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause                             | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling <input type="checkbox"/> |      |      |     |   |                   |                    |             |              |              |
| Operator <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Material <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Setup <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Other <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Process <input type="checkbox"/>       |      |      |     |   |                   |                    |             |              |              |
| Supplier <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Training <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Unapproved <input type="checkbox"/>    |      |      |     |   |                   |                    |             |              |              |

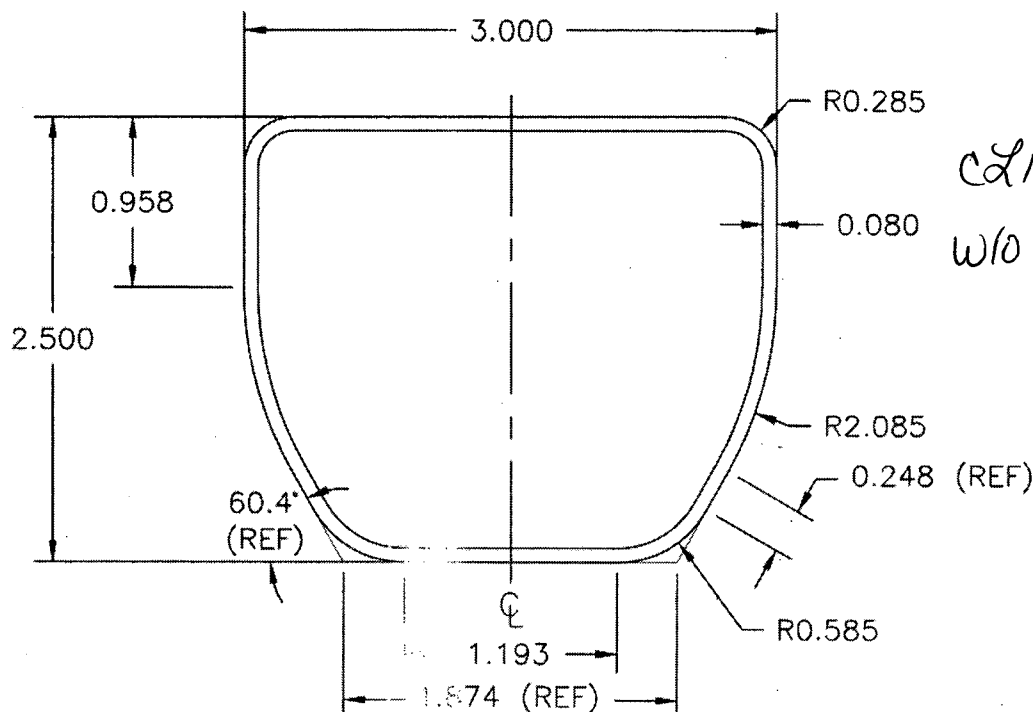
**FAULT CATEGORY**

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |




|         |          |          |          |   |                        |
|---------|----------|----------|----------|---|------------------------|
| DESIGN  | KE       | DRAWN BY | 4P       | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED | #        | APPROVED | #        | DRAWING NO.<br>D2622                              | REV. C<br>SHEET 1 OF 1 |
| DATE    | 02.09.11 |          |          | TITLE<br>STEP EXTRUSION                           | SCALE<br>1:1           |
| A       | 96.11.29 |          |          | NEW ISSUE   |                        |
| B       | 97.12.12 |          |          | CHANGE MATERIAL, ADD TOL. QSI                     |                        |
| C       | 02.09.11 |          |          | 0.080 WAS 0.085; ADD PART & DIE No.               |                        |
| CI      | #        | 4P       | 02.10.04 | ADD 'REV. A' TO DIE NUMBER.                       |                        |

RELEASED  
02.09.11 #



#### D2622-XXX STEP EXTRUSION

- 1) PART NUMBER IS D2622-XXX WHERE 'XXX' IS CUT LENGTH IN INCHES (EG. D2622-120 IS 120" LONG)
- 2) MATERIAL 6061-T6 (QQ-A-200/6)
- 3) MANUFACTURED USING BON-L # 897123 REV. A 
- 4) A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE MINIMUM MECHANICAL PROPERTIES STATED BELOW:

MINIMUM TENSILE YIELD STRENGTH = 35 ksi  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi  
MINIMUM ELONGATION = 8%

- 5) PART IS SYMMETRIC ABOUT CENTERLINE
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO19871

Purchase Order Date 5/14/2013

PO Print Date 5/14/2013

Page Number 1 of 1

Order From :

VC-BON001

SIGNATURE ALUMINUM CANADA INC.  
C/O/ T10322C  
P.O. BOX 4488, STN A  
TORONTO, ON M5W 4H1  
CA

Contact Name

Vendor Phone 905-427-6550

Vendor Fax 905-427-2246

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

10127-2607

Tax Resale Nbr

Net 30

Terms

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

FOAMED  
6/13/2014

| Line Nbr | Reference<br>Revision ID<br>Vendor Part Number | Description/<br>Mfg ID | Req Date/<br>Taxable | Req Qty/<br>Unit of Measure | Ship Method | Unit Price | Extended<br>Price |
|----------|--|------------------------|----------------------|-----------------------------|-------------|------------|-------------------|
| 1        | D2622-120CP                                    | Extrusion              | 6/5/2013<br>Yes      | 120.00<br>Each              | Yours ppd   | \$29.2232  | \$3,506.78        |

ARC 140

Special Inst: EXTRUDE AS PER DWG D2622 REV. C1  
B101765  
MATERIAL: 6061-T6 AS PER QQ-A-200/8  
MINIMUM YIELD TENSILE STRENGTH  
= 35 KSI  
MINIMUM ULTIMATE TENSILE  
STRENGTH = 38 KSI  
MINIMUM ELONGATION = 8 %  
120" LONG  
SIGNATURE ALUMINUM TOOL # 897123

PO Total:

\$3,506.78

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 5/14/2013

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required ☒ YES ☐ NO





ACCT# 46024

## INVOICING AND COMPANY LOCATION

SIGNATURE ALUMINUM CANADA  
1850 CLEMENTS ROAD  
PICKERING ON L1W 3R8

## SHIPPING MANIFEST

MANIFEST DATE / DATE DU BODEREAU  
05-30-13MANIFEST NUMBER / N° DE BODEREAU  
010595SALES ORDER NUMBER / N° DE COM  
109996

## SHIP TO / EXPÉDIÉ À

DART AEROSPACE LTD.  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
CANADA

PHONE: 613-632-5200

## SOLD TO / VENDUE À

DART AEROSPACE LTD.  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
CANADA

PHONE: 613-632-5200

TERMS / FREIGHT

PP

REFER TO  
THESE NUMBERS ON  
ALL CORRESPONDANCEREFEREZ-VOUS A CES  
NUMEROUS POUR TOUTE  
CORRESPONDANCE

| LOCATION               | TRAILER NUMBER /<br>REMORQUE Nombre | SALESMAN /<br>VENDEUR                        | CREDIT REP / REP DU CRÉDIT | SALES REP / REP. DES<br>VENTES               |
|------------------------|-------------------------------------|--|----------------------------|--|
| PIC                    | 26913                               | 042  |                            | G.ATTENBOROU                                 |
| JOB / FICHIER          |                                     | FIELD SALES REP / REP<br>REGIONAL DES VENTES |                            | CUST SERVICE REP / REP.<br>SERVICE CLIENTELE |
|                        |                                     | G.ATTENBOROU                                 |                            | DLB  |
| CARRIER / TRANSPORTEUR |                                     |  |                            |  |
| JODEE                  |                                     |  |                            |  |

| CUSTOMER ID / ID DU<br>CLIENT | ORDER DATE / DE LA COM                                    | CUSTOMER PO NUMBER / CLIENT PO Nombre |  | BILL OF LADING NUMBER / NO. DE CONNAISSEMENT |                                      | JOB / FICHIER                                |                                    | FIELD SALES REP / REP<br>REGIONAL DES VENTES |  | CUST SERVICE REP / REP.<br>SERVICE CLIENTELE |  |
|-------------------------------|---|---------------------------------------|--|--|--------------------------------------|--|------------------------------------|--|--|--|--|
| 46024                         | 05/14/13  | PO19871                               |  | 010595                                       |                                      |  |                                    | G.ATTENBOROU                                 |  | DLB  |  |
| ITEM<br>NO. /<br>NUMÉRO       | ORIGINAL ORDER<br>QUANTITY /<br>Quantité d'ordre ORIGINAL | UNIT /<br>UNITÉ                       | PREVIOUS<br>SHIPPED QUANTITY /<br>PRÉCÉDENT<br>Quantité livrée | MFG. PART NUMBER /<br>MFG. PARTIE NUMÉRO     | ALLOY & TEMPER /<br>ALLIAGE & TEMPER | FINISH DESCRIPTION / DESCRIPTION DE FINITION | NBR OF<br>PKGS /<br>NBR DE<br>PKGS | GROSS LBS /<br>LIVRES BRUT                   | NET QUANTITY<br>/<br>QUANTITÉ<br>NETTE | UNIT /<br>UNITÉ                              | QUANTITY<br>DUE /<br>Quantité en<br>raison |
| 001                           | 1,094 LB  |                                       |  | DAA-897123-2                                 | 6061 T6                              |  | 3                                  | 1,243  | 1,210                                  | LB   |  |
|                               | 496 KG  |                                       |  | D2622-120CP                                  | 120.0000 IN                          |  |                                    | 564  | 549                                    | KG   |  |
|                               | 120 PC  |                                       |  |  | Cut(+): 0.1180 Cut(-): 0.0000        | Min: -10 % Max: 10 %                         |                                    |  | 140                                    | PC   |  |
|                               |   |                                       |  |  |                                      | 823305 / 177164                              | 1                                  | 434  | 423                                    |  | 49 PC                                      |
|                               |   |                                       |  |  |                                      | 823305 / 177165                              | 1                                  | 434  | 423                                    |  | 49 PC                                      |
|                               |   |                                       |  |  |                                      | 823305 / 177166                              | 1                                  | 375  | 364                                    |  | 42 PC                                      |

140

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.

No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

CUSTOMER ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION

Page 1

DATE OF DELIVERY

DRIVER

|        |       |       |    |
|--------|-------|-------|----|
| 3      | 1,243 | 1,210 | LB |
|        | 564   | 549   | KG |
|        |       | 140   | PC |
| TOTALS |       |       |    |



**signature  
aluminum**  
CANADA INC.

**SIGNATURE ALUMINUM CANADA**

1850 CLEMENTS RD  
PICKERING, ON L1W 3R8

**CERTIFICATE OF COMPLIANCE**

| Cert Date  | Cert No. | Sales Order | Page     |
|------------|----------|-------------|----------|
| 05/30/2013 | 5304267  | 109996      | 1        |
| Cust PO    | B/L No   | Lot         | Date     |
| PO19871    | 010595   | 823305      | 05/30/13 |

| Sold To   | Ship To   |
|---|---|
| 46024<br>DART AEROSPACE LTD.<br>1270 ABERDEEN ST.<br>HAWKESBURY, ON K6A 1K7<br>CANADA | 46024<br>DART AEROSPACE LTD.<br>1270 ABERDEEN ST.<br>HAWKESBURY, ON K6A 1K7<br>CANADA |

| Item No                       | Part No      | Item Description  | Cust Part   |
|-------------------------------|--------------|-------------------|-------------|
| 001                           | DAA-897123-2 | 10FT MILL 6061 T6 | D2622-120CP |
| Gross Weight                  | 1,243 LBS    |                   |             |
| Net Qty                       | 1,210 LBS    |                   | 3 PKGS      |
| Specification                 |              | Die Desc          |             |
| AMS-QQ-A-200/8 & ASTM B221-08 |              | 5<br>3/65/21      |             |

**Mechanical Tests:**

| Tensile      | Yield        | % Elongation | Conductivity | HRE |
|--------------|--------------|--------------|--------------|-----|
| MPA / KSI    | MPA / KSI    |              |              |     |
| 318.0 / 46.1 | 291.1 / 42.2 | 10.3         | N/A          | 92  |

**Chemical Analysis:**

| SI   | FE   | CU   | MN   | MG   | CR   | ZN   | TI   | V    |
|------|------|------|------|------|------|------|------|------|
| 0.61 | 0.27 | 0.21 | 0.05 | 0.88 | 0.07 | 0.07 | 0.02 | 0.01 |

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

S. Mazzotta, Director of Quality Signature Aluminum Canada Inc